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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,301	08/16/2001	Steven Black	AUS920010242US1	3154
35525	7590	10/03/2005	EXAMINER	
IBM CORP (YA)			CHAI, LONGBIT	
C/O YEE & ASSOCIATES PC				
P.O. BOX 802333			ART UNIT	
DALLAS, TX 75380			2131	
			PAPER NUMBER	

DATE MAILED: 10/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,301

Applicant(s)

BLACK ET AL.

Examiner

Longbit Chai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to the Appeal Brief filed on August 16, 2005. Claims 1 – 21 were originally received for consideration. Therefore, presently pending claims are 1 – 21.

Response to Arguments

2. In view of the Appeal Brief filed on August 16, 2005, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 – 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farley et al. (Publication Number: 2002/0078381), in view of Burrows et al. (Publication Number: 2002/0073338).

As per claim 1, 8 and 15, Farley teaches a method in a data processing system for reporting security situations, comprising the steps of:

logging events by storing event attributes as an event set, wherein each event set includes a source attribute, a target attribute and an event category attribute (Farley, see example, Para [0019] Line 1 – 3 and Para [0019] Line 12 – 17: SRC / DEST / EVENT TYPE as the event attribute parameters);

Farley teaches classifying and correlating the raw events (Farley, Para [0019] Line 1 – 3). However, Farley does not disclose expressly classifying events as groups by aggregating events with at least one attribute within the event set as an identical value.

Burrows teaches classifying events as groups by aggregating events with at least one attribute within the event set as an identical value (Burrows, see example, Para [0050] and Para [0046] Line 10 – 11: Burrows teaches aggregating the correlated raw events into event groups with at least one attribute within the event set as an identical value such as (a) same SRC address (Para [0050]), or (b) same DEST address (Para [0046] Line 10 – 11) to detect broadcasting traffic storm and server attacked network problems respectively).

calculating severity levels for the groups (Burrows: Para [0050] Line 3 – 9: the “broadcast storm” is qualified to meet the severity level as an event caused by the identical SRC and different DEST when the aggregating events exceed the predetermined number (i.e., threshold) as taught by Burrows).

reporting a group from the groups to a user as a situation, if a severity level of the group exceeds a threshold value (Burrows: Para [0050] Line 3 – 9 and Para [0018] Line 14 – 17: instructing the switches to discard packets or disable the forwarding SRC port accordingly, as an appropriate action of the problem reports).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Burrows within the system of Farley because (a) Farley teaches classifying and correlating raw events by providing a security management system in a networked computer system (Farley, Para [0019] Line 1 – 3 and Para [0016]) and (b) Burrows teaches improving network throughput performance by recognizing undesirable packet traffic patterns after aggregating the correlated raw events into event groups such as broadcasting traffic storm and server

attacked group events (Burrows, see example, Para [0050] and Para [0046] Line 10 – 11).

As per claim 2, 9 and 16, Farley as modified further teaches the severity levels are calculated based on at least one of the number of event sets within each of the groups, the source attribute of the event sets within each of the groups, the target attribute of the event sets within each of the groups, and the event category attribute of the event sets within each of the groups (Burrows, see example, Para [0050] and Para [0046] Line 10 – 11: Burrows teaches aggregating the correlated raw events into event groups with at least one attribute within the event set as an identical value such as same SRC address (Para [0050])), or (b) same DEST address (Para [0046] Line 10 – 11) to detect broadcasting traffic storm and server attacked network problems respectively).

As per claim 3, 10 and 17, Farley as modified further teaches the events include at least one of a web server event, an electronic mail event, a Trojan horse, denial of service, a virus, a network event, an authentication failure, and an access violation (Farley: Para [0016] Line 1 – 10).

As per claim 4, 11 and 18, Farley as modified further teaches calculating the threshold value based on at least one of the source attribute of the event sets within the group, the target attribute of the event sets within the group, the event category attribute in each event set of the group, and the number of attributes in each event set of the

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group that are held constant across all of the event sets in the group (Burrows: Para [0050] Line 3 – 9: the “broadcast storm” is qualified to meet the severity level as an event caused by the identical SRC and different DEST when the aggregating events exceed the predetermined number (i.e., threshold) as taught by Burrows).

As per claim 5, 12 and 19, Farley as modified further teaches the target attribute represents one of a computer and a collection of computers (Farley, see example, Para [0019] Line 1 – 3 and Para [0019] Line 12 – 17: SRC / DEST / EVENT TYPE as the event attribute parameters).

As per claim 6, 13 and 20, Farley as modified further teaches further teaches the source attribute represents one of a computer and a collection of computers (Farley, see example, Para [0019] Line 1 – 3 and Para [0019] Line 12 – 17: SRC / DEST / EVENT TYPE as the event attribute parameters).

As per claim 7, 14 and 21, Farley as modified further teaches aggregating a subset of the groups into a combined group (Farley, see example, Para [0079] and [0080]; Burrows, see example, Para [0050] and Para [0046] Line 10 – 11).


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


LBC

Longbit Chai
Examiner
Art Unit 2131


Primary Examiner
AU 2131
9/27/05